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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,466	01/27/2004	Hideki Nakajima	33240 M 016	1148
7590	07/17/2006		EXAMINER	
SMITH, GAMBRELL & RUSSELL, LLP			LAUGHLIN, NATHAN L	
SUITE 800			ART UNIT	PAPER NUMBER
1850 M STREET, N.W.				2125
WASHINGTON, DC 20036				

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/764,466	NAKAJIMA ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Nate Laughlin	2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 27 January 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 and 3 is/are rejected.
- 7) Claim(s) 2 and 4 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 1-24-2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____ .  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “1” has been used to designate both “store” (figure 1) and “set illumination (figure 3, step 1)”, reference character “2” (figure 1) has been used to designate both “monitoring center” and “acquire outside – store illumination measured value (figure 3, step 2)”, reference character “3” (figure 1) has been used to designate both “public line” and “transmit set illumination, outside – store illumination measured value to monitoring center (figure 3, step 3)”. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. Reference number 102; figure 7, lines 3 and 4 use the word “MUASURED”, which should probably be “Measured”.

### ***Specification***

3. The disclosure is objected to because of the following informalities:

Art Unit: 2125

The examiner found multiple uses of awkward language such as “each time of all of tomorrow”, and “controlling each equipment is installed”. Examiner requests that the awkward and unclear language be corrected in the specification.

Page 13 lines 8-10 refer to “set a desired temperature”, figure 7s reference number 101 refers to set a desired illumination.

Appropriate correction is required.

### ***Claim Objections***

4. Claims 2, and 4 are objected to because of the following grammatical and use of terminology informalities. Appropriate correction is required.

Although applicants claims 2, 3 and 4 meet the requirement of 112/2nd, i.e. the metes and bounds are determinable, the grammar and use of terminology could be improved. The phrase " for each time of all of tomorrow " recited on lines 23,34, and 26 of claim 2 and recited on lines 27,28, and 30, of claim 3 would be better presented as " for each time interval of tomorrow ".

5. Claim 4 would better be presented by removing “by the equipment” on lines 3-4. Claim 3 will need to be changed alongside claim 4, by removing “by equipment” in lines 18-19 of claim 3. Because the term “outlet/inlet door” is used by the claim to mean “Equipment ”, while the accepted meaning is “structure” The Merriam-Webster dictionary defines ‘equipment’ as “things used in equipping”, however a inlet/outlet door does not conform to this definition.

### ***Claim Rejections - 35 USC § 102***

Art Unit: 2125

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Brown Jr. et al (U.S. Pat 5,761,083).

As to claim 1, Brown teaches an in-store equipment remote monitoring system (col. 1 lines 22-49, col. 6 line 64 – col. 7 line 10) comprising a controller (figure 2, element 30) provided in each store and monitoring and controlling in-store equipment (figure 2, element 34) (col. 3 lines 50-53, col. 4 lines 25-34, col. 5 lines 30-39) and a monitoring computer (figure 1, element 10) connected to the controller in the store though a public line (col. 3 line 66 - col. 4 line 9) wherein the controller (30) comprises data transmission means (figure 2, element 36) for transmitting to the monitoring computer data related to each store in-store equipment (col. 6 lines 51-67) and predetermined measurement data (figure 2, element 42) (col. 6 lines 16-21, 57-67), and display means (col. 5 lines 45-65, figure 4) for displaying power saving advice information fed from the monitoring computer (col. 5 lines 6-30, col. 10 lines 28-59) , and the monitoring computer comprises power saving advice information production means for producing power saving advice information for efficiently operating each store equipment on the basis of data received from the controller (col. 4 line 43 – col. 5 line 5), and power saving advice information transmission means (figure 1, element 20) for transmitting to the controller the produced power saving advice information (figure 3B, element 32)(col. 4 lines 16-42) .

*Claim Rejections - 35 USC § 103*

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Brown Jr. (U.S. Pat 5,761,083) in view of Ehlers (U.S. Pat 5,924,486), and further in view of Rainer (U.S. PG-Pub 2002/0124992).

As to claim 3, Brown teaches an in-store equipment remote monitoring system (col. 1 lines 22-49, col. 6 line 64 – col. 7 line 10) comprising a controller (figure 2 element 30) provided in each store and monitoring and controlling in-store equipment (col. 3 lines 50-53, col. 4 lines 25-34, col. 5 lines 30-39) and a monitoring computer (figure 1, element 10) connected to the controller (30) in the store through a public line (col. 3 line 66 - col. 4 line 9) wherein the controller comprises data transmission means (figure 2, element 36) for transmitting to the monitoring computer data related to each store in-store equipment (col. 6 lines 51-67) and predetermined measurement data (col. 6 lines 16-21, 57-67), and display means (col. 5 lines 45-65, figure 4) for displaying power saving advice information fed from the monitoring computer (col. 5 lines 6-30, col. 10 lines 28-59), and the monitoring computer comprises power saving advice information production means for producing power saving advice information for efficiently operating each store equipment on the basis of data received from the controller (col. 4 line 43 – col. 5 line 5), and power saving advice information transmission means (fig. 1, element 20) for transmitting to the controller the produced power saving advice information (col.

4 lines 16-42), and wherein when the in-store air conditioning equipment (col. 1 lines 22-29), the data transmission means transmits an inside-store temperature set by a user (col. 10 lines 28-39, figure 3b, element 34).

Brown does not disclose an inside-store temperature measured value and an outside-store temperature measured value, Brown also does not teach using historical data related to the inside-store temperature measured values, the outside-store temperature measured values, and the measured values of factors affecting the inside-store temperature by equipment other than the air conditioning equipment from the controller to the monitoring computer, the power saving advice information production means comprises means for calculating, on the basis of historical data related to the inside-store temperature measured values, the outside-store temperature measured values, and the measured values of the factors affecting the inside-store temperature by the equipment other than the air conditioning equipment which are received from the controller.

Ehlers discloses an inside-store temperature measured value (figure 2, element 8) and an outside-store temperature measured value(8) (col. 10 lines 18-20), Ehlers also teaches historical data related to the inside-store temperature measured values (figure 4 element 22), the outside-store temperature measured values (22) (col. 9 54-64, col. 10 lines 15- 19, 29-30), and the measured values of factors affecting the inside-store temperature by equipment other than the air conditioning equipment from the controller to the monitoring computer (col. 10 lines, 18-20, 24-30, col. 12 lines 29-31, 47-51) the power saving advice information production means comprises means for calculating, on the basis of historical data related to the inside-store temperature measured values (22) , the outside-store temperature measured values (22) (col. 10 lines 18-20, 33-35, col. 21 lines 33-55), and the measured values of the factors affecting the inside-store

temperature by the equipment other than the air conditioning equipment which are received from the controller (col. 10 lines 24-35). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate a “an inside-store temperature measured value and an outside-store temperature measured value, historical data related to the inside-store temperature measured values, the outside-store temperature measured values and the measured values of factors affecting the inside-store temperature by equipment other than the air conditioning equipment from the controller to the monitoring computer the power saving advice information production means comprises means for calculating, on the basis of historical data related to the inside-store temperature measured values , the outside-store temperature measured values, and the measured values of the factors affecting the inside-store temperature by the equipment other than the air conditioning equipment which are received from the controller” as shown by Ehlers into Brown. The motivation to combine Ethers into Brown is to provide an environmental condition control system that automatically controls internal environmental condition to optimize comfort and minimize energy consumption and/or energy cost, based on user-defined parameters (Ehlers, col. 2, lines 33-37).

Neither Brown nor Ehlers disclose using historical data related to weather forecasting, and weather forecasting for tomorrow, an inside-store temperature estimated value for each time of all tomorrow, and means for calculating, on the basis of the obtained inside store-temperature estimated value for each time of all tomorrow and the set inside-store temperature received from the controller, an inside-store temperature adjustment level for each time of all tomorrow. Rainer discloses using historical data related to weather forecasting, and weather forecasting for tomorrow [Rainer 0025], an inside-store temperature estimated value for each time of all of

tomorrow [0045, lines 6-7], and means for calculating [0045, lines 5-6], on the basis of the obtained inside-store temperature estimated value for each time of all tomorrow [0045, lines 2-4], and the set inside-store temperature received from the controller[0045, lines 2-4], an inside-store temperature adjustment level for each time of all tomorrow [0045]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate “historical data related to weather forecasting, and weather forecasting for tomorrow, an inside-store temperature estimated value for each time of all of tomorrow, and means for calculating, on the basis of the obtained inside-store temperature estimated value for each time of all tomorrow, and the set inside-store temperature received from the controller, an inside-store temperature adjustment level for each time of all tomorrow” as shown by Rainer into the in-store equipment monitoring system of Brown. The motivation to combine Rainer into Brown as modified by Ehlers is to reduce energy use and peak electric demand by improving upon current ventilation cooling control technology by employing temperature predictions and a means of providing improved temperature control (Rainer, [0014]).

*Allowable Subject Matter*

10. Claim 2 would be allowable if rewritten or amended to overcome the objection(s), set forth in this Office action. The reason for allowance is that the prior art records do not teach an in-store equipment remote monitoring system that produces power saving advice information to a user, using historical data related to weather forecasting, outside-store illumination, and weather forecasting for tomorrow, along with an estimated values for tomorrow, and means for calculating, recommended in-store illumination for each time interval of tomorrow.

11. Claim 4 would be allowable if rewritten to overcome the objection(s) set forth in this Office action, and rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reason for allowance is that the prior art records do not teach a measured value of a factor affecting the inside-store temperature by other than air condition equipment such as a change in interior temperature by releasing air from freezing equipment into the store.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Afshari (U.S. 6,577,962) teaches a weather forecasting system using prior data and predicted data for subsequent days to predict energy usage loads on facilities. Sasao (U.S. 6,454,177) teaches an air conditioning management system using forecasted temperatures to minimize energy use.

***Inquires***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nate Laughlin whose telephone number is 571-272-1042. The examiner can normally be reached on Monday – Thursday, 7:30 am – 5:00 pm (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on 571-272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nate Laughlin  
Patent Examiner

6-9-06



CHANH NGUYEN  
PRIMARY EXAMINER